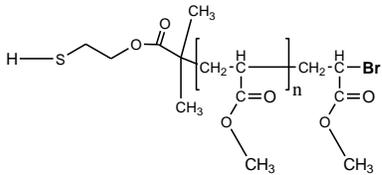


Sample Name:
Poly (methyl acrylate), α -thiol-terminated

Sample # P16380-MASH

Structure:

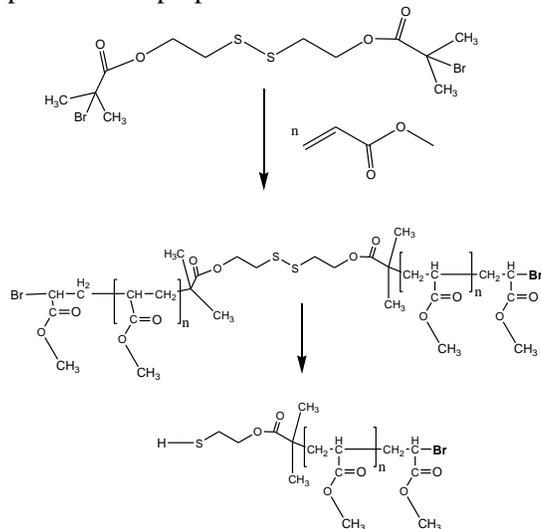


Composition:

$M_n \times 10^3$	1.2
PDI	1.3
Functionality	~90%

Synthesis procedure:

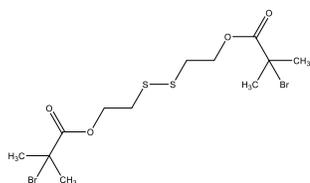
The polymer was synthesized by ATRP polymerization process. The following reaction scheme shows how the product was prepared:



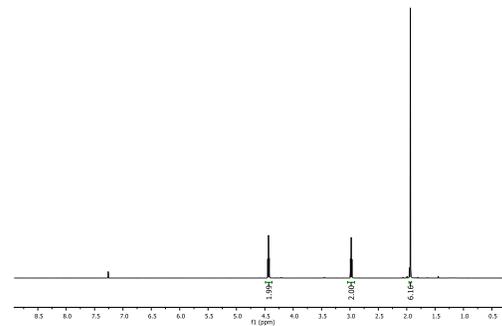
Characterization:

The polydispersity was characterized by size exclusion chromatography (SEC) and molecular weight was calculated from $^1\text{H NMR}$. The functionality was confirmed by disappearance of methylene proton adjacent to disulfide bond at 2.9 ppm and appearance of thiol proton at 2.7 ppm.

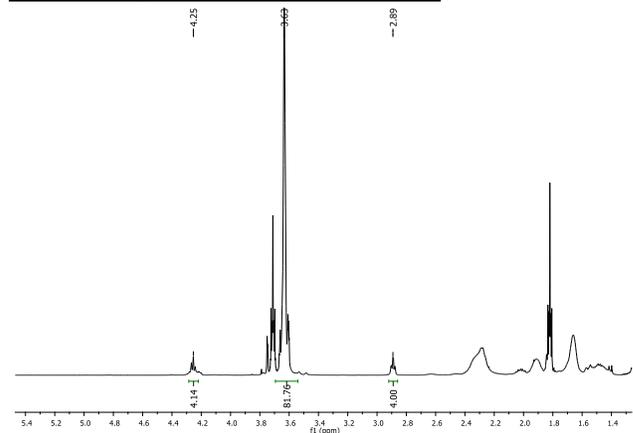
Structure of ATRP initiator:



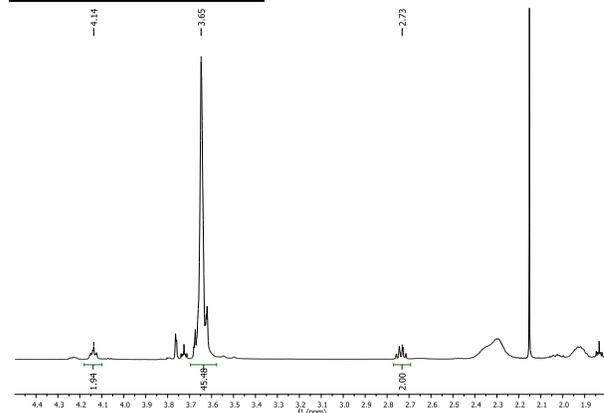
$^1\text{H NMR}$ of ATRP initiator:



$^1\text{H NMR}$ spectrum of MA-SS-MA:



$^1\text{H NMR}$ of MA-SH:



SEC elugram of MA-SS-MA and MA-SH:

